Before the
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	**§**	**Rulemaking Docket #**
	§	
Amendment of Part 97 of the Commission's Amateur Radio	**§**	**RM - 11831**
Service Rules to Reduce Interference and Add Transparency	**§**	
to Digital Data Communications	**§**	

To: The Chief, Wireless Telecommunications Bureau
Chairman and Commissioners of the Commission
Via: Office of the Secretary

COMMENTS OF JAMES E. DALLAS, AD5NL
REGARDING THE PETITION OF RON KOLARIK

I submit these comments today in partial opposition to the "PETITION FOR RULEMAKING" filed October 9, 2018 by Mr. Ron Kolarik, K0IDT.

I. BIOGRAPHICAL STATEMENT AND STATEMENT OF INTEREST

I am a licensed amateur radio operator (AD5NL, formerly KC5WXX). I was first licensed as a Technician class operator in 1996 and have maintained my license continually since that time, as well as upgrading to Technician Plus, General and Extra Class. I both transmit and receive digital modes in the HF ham bands and have an interest in their development and use, as well as maintaining fair play and good practices throughout the amateur spectrum. I do not have any specific experience with Automatically Controlled Data Stations.

In addition to my experience as a radio operator, I also am an Information Technology professional (currently working as a database administrator at Vanderbilt University Medical Center in Nashville, Tennessee) and a non-practicing attorney (inactive Texas Bar No. 24059644). I am a graduate

of the University of Texas at Austin and the University of Houston Law Center. I submit these solely comments on my own behalf and do not represent the interests of my employers or any clients.

II. OPPOSITION TO PROPOSED DELETION OF 47 CFR § 97.221(c)

Mr. Kolarik and others (see his footnotes) note that there are several observed operational difficulties with ACDS operations. While I do not doubt that these exist, I feel that a complete elimination of the section may be an over-reaction at this time.

My general inclination toward rulemaking is that the Commission should adhere to *laissez-faire* principle espoused by the ARRL in their comments on RM-11708: "***It is important and incumbent on the Commission in the fundamentally experimental Amateur Radio Service to reduce or eliminate by deregulation whenever possible those impediments to experimentation with data emissions.***"

Rather than effect an absolute ban on automated stations outside of the reservations of paragraph (b), I would suggest that the Commission consider adding some additional stipulations to paragraph (c) that might go some distance toward resolving the interference concerns raised by Mr. Kolarik and others. For example, the Commission may consider the following:

(1) Adding a requirement that stations transmitting outside of the frequencies specified in paragraph (b) identify themselves using Morse Code (emission type A1A or A2A), so that stations that are operating improperly may be readily identified and brought into compliance; *or*

(2) Restricting automatically-controlled data operations to General, Advanced, and Extra Class operators; *or*

(3) Requiring that ACDS stations be registered with the Commission before being put into operation.

III. CONCERNS RELATING TO THE LANGUAGE CHANGES TO § 97.309(a)(4)

I am sympathetic to the proposed changes to section 97.309, however, I see several problems with Mr. Kolarik's proposed language.

In his petition, Mr. Kolarik proposes the following revision for paragraph (a)(4):

> (4) An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, ~~such as CLOVER, G-TOR, or PacTOR~~, and the protocol used can be be monitored, in it's entirety, by 3rd parties, with freely available open source software, for the purpose of facilitating communications.

I agree with the proposition that the Amateur Radio Service rules should be phrased generally, and I do not specifically object to striking references to CLOVER, G-TOR and PACTOR. I believe that the rules for data transparency should be phrased in terms of general principles, but I also believe that the current standard ("any technique whose technical characteristics have been documented publicly") is too ambiguous and permissive, in that it doesn't really define with any specificity what characteristics must be documented.

In my opinion, the appropriate standard for sufficiency of technical documentation specified in paragraph (4) ought to be, that the technique must be sufficiently well-documented such that an amateur operator with reasonable resources, knowledge and technical skill can decode the data emission using readily-available hardware, software, or a combination thereof.

"Freely available open source software" should be viewed by the Commission as merely one form of discharging the obligation to provide useful, complete technical documentation. However, I do not believe it should be the only permissible method, particularly as some digital modes may be better decoded in hardware than in software.

Furthermore, what does "freely available" mean? Is this free as in *libre* (without restriction or discrimination), or free as in *gratis* (without cost)? Or both? And if we are to expect all software to be distributed without cost or restriction, what incentive exists for developing new software?

Additionally, requiring public documentation *and* the existence of fully-useful software makes it logically (not merely economically) impossible to create new modes. Because the mode will likely need to be tested with incomplete, unshippable code, before it is ready for a wide public release. Software developers should be permitted, at the very least, to send data emissions based on a publicly-available white paper alone, until such time as their technique has been perfected.

Finally, I believe that there should be a grandfather clause for "all modes previously authorized" so as not to inconvenience existing operations.

In addition to cleaning up some of Mr. Kolarik's grammar errors, I propose the following substitute language for revising paragraph (4), which embraces the standard I have set forth above:

> (4) An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, ~~such as CLOVER, G-TOR, or PacTOR~~, and sufficiently well-documented for the purpose of facilitating communications. For the purposes of this paragraph, a technique is considered to be sufficiently well-documented if a reasonable person with the knowledge, technical skill, and material resources of an average amateur radio operator can use the documentation in its totality (including all white papers, how-to articles, technical manuals, computer software, hardware schematics,

photographs, videos, interactive demonstrations and the like) to fully decode the transmitted RTTY or data emissions. For the purposes of this paragraph, documentation is considered public if it is published on the Internet or in a technical magazine, journal, or circular, or is otherwise available on an open and non-discriminatory basis at no-cost or at a cost that would be considered fair and reasonable by the reasonable amateur operator. In no case shall this paragraph be construed as disallowing the use of any mode deemed legal prior to April 1, 2019.

I respectfully ask that the Commission consider adding my substituted language to paragraph (4).

Respectfully Submitted,

James Evan "Gwen" Dallas

1608 Mary Court

Columbia, Tennessee 38401

Phone: (713) 254-4175

E-mail: jim.dallas@gmail.com

Submitted 4 April 2019